

Title (en)

Resin tube joint with reinforcing ring

Title (de)

Kunstharzrohrkupplung mit einem Verstärkungsring

Title (fr)

Raccord de tuyau en résine avec un anneau de renforcement

Publication

**EP 1250970 A2 20021023 (EN)**

Application

**EP 02013869 A 19990427**

Priority

- EP 99108222 A 19990427
- JP 13013698 A 19980513

Abstract (en)

A ring member (24) and ring members (58a, 58b) made of metal are tightened and installed to the outer circumferential surface of a body (12) made of a resin material. Accordingly, the body (12) is prevented from outward deformation. When a tube joint (10) is used in a high temperature atmosphere, even if any force acts on a fluid tube (102) in the direction to cause detachment from the tube joint (10) due to any external force or the pressure fluid flowing through the inside of the tube joint (10), then the fluid tube (102) and a connecting member (14) inserted into the body (12) are reliably prevented from disengagement. <IMAGE>

IPC 1-7

**B21D 39/04**; **F16L 47/06**; **B25B 27/10**

IPC 8 full level

**F16L 21/08** (2006.01); **B21D 39/04** (2006.01); **B25B 27/10** (2006.01); **F16L 13/14** (2006.01); **F16L 33/207** (2006.01); **F16L 33/23** (2006.01); **F16L 37/092** (2006.01); **F16L 37/098** (2006.01); **F16L 37/14** (2006.01); **F16L 47/12** (2006.01)

CPC (source: EP KR US)

**B21D 39/048** (2013.01 - EP US); **B25B 27/10** (2013.01 - EP US); **F16L 13/141** (2013.01 - EP US); **F16L 13/142** (2013.01 - EP US); **F16L 13/143** (2013.01 - EP US); **F16L 15/00** (2013.01 - KR); **F16L 33/2071** (2013.01 - EP US); **F16L 33/2073** (2013.01 - EP US); **F16L 37/0915** (2016.05 - EP US); **F16L 37/0925** (2013.01 - EP US); **F16L 37/0926** (2019.07 - EP US); **F16L 37/0927** (2019.07 - EP US); **F16L 37/0982** (2013.01 - EP US); **F16L 47/12** (2013.01 - EP US); **F16L 47/24** (2013.01 - EP US); **Y10T 29/536** (2015.01 - EP US); **Y10T 29/53657** (2015.01 - EP US); **Y10T 29/5367** (2015.01 - EP US); **Y10T 29/5383** (2015.01 - EP US)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0957306 A2 19991117**; **EP 0957306 A3 20000719**; **EP 0957306 B1 20030226**; CN 1096591 C 20021218; CN 1235254 A 19991117; CN 1249372 C 20060405; CN 1405480 A 20030326; DE 69905514 D1 20030403; DE 69905514 T2 20031211; DE 69920059 D1 20041014; DE 69920059 T2 20050929; DE 69932270 D1 20060817; DE 69932270 T2 20070628; EP 1250970 A2 20021023; EP 1250970 A3 20021030; EP 1250970 B1 20040908; EP 1443252 A2 20040804; EP 1443252 A3 20040811; EP 1443252 B1 20060705; EP 1688197 A2 20060809; EP 1688197 A3 20060823; JP H11325362 A 19991126; KR 100345914 B1 20020727; KR 19990088137 A 19991227; US 2001045748 A1 20011129; US 2002175518 A1 20021128; US 2003067165 A1 20030410; US 2005121910 A1 20050609; US 6415488 B1 20020709; US 6578879 B2 20030617; US 6880864 B2 20050419; US 7093862 B2 20060822; US 7210708 B2 20070501

DOCDB simple family (application)

**EP 99108222 A 19990427**; CN 02146869 A 20021016; CN 99106397 A 19990513; DE 69905514 T 19990427; DE 69920059 T 19990427; DE 69932270 T 19990427; EP 02013869 A 19990427; EP 04008172 A 19990427; EP 06009289 A 19990427; JP 13013698 A 19980513; KR 19990016450 A 19990508; US 18945702 A 20020708; US 27909802 A 20021024; US 30044799 A 19990428; US 3016205 A 20050107; US 65685800 A 20000907